

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA) Burlington VT
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR: MONTH                      YEAR April                        2012
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		SIGNATURE /s/ Gregory A. Hanson, SH WFO BTV DATE May 3 2012

*When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).*

☒ An X inside this box indicates that no flooding occurred within this hydrologic service area.

April was an uneventful month from a hydrologic perspective. River flows were below to much below normal, and the only flows near or above normal were associated with two precipitation events. Figure 1 shows the hydrograph for the Winooski River at Essex Junction Vermont, and is a representative example of the predominantly low flows interspersed with the two rises.

April started with river flows in the 25<sup>th</sup> percentile or lower, as the spring freshet had concluded in March, and the first week of April was dry. Starting on April 8, an upper level low pressure area backed into the region from the northeast. Rain fell in the lower elevations, and copious amounts of snow in the higher terrain as upslope winds aided the precipitation. Most precipitation fell on April 9, but continued to April 11. Atop Mount Mansfield, 25 to 30 inches of new snow was reported, with 1 to 3 inches of liquid precipitation in the higher terrain of northern Vermont and the northwest slopes of the Adirondacks. The Champlain and Connecticut valleys, as well as southern Vermont saw very little precipitation. (Figures 2, 3) Rivers saw only modest rises as the heaviest precipitation fell in the form of snow, and was relegated to the higher terrain. As the snow melted in the following days it had very little effect on river flows.

Rivers returned to base flow through mid-month, until another rainfall event April 21 through April 24. A slow moving cold front moved through the region late on April 21, then stalled as a wave developed on the front and moved north across New England. Southern Vermont saw the heaviest rainfall, with over three inches in Windsor county Vermont, tapering off to 1 ½ inches in northern Vermont and northern New York (Figure 4). Rivers saw rises of several feet, but remained well below flood stage.

The month ended with near to above normal precipitation across much of the area as a result of the two storm systems. Southern Vermont, which missed out on most of the early April rains, was below normal. (Figures 5 & 6) Despite the precipitation, the National Drought Monitor characterized nearly all the Hydrologic Service Area as D0, Abnormally Dry, for the month due to longer term dryness.

Lake Champlain, having crested from the spring freshet in March, fell below 96 feet by mid-April. The lake rose about ½ foot after the April 21-24 rainfall, but ended the month well below normal, and more representative of a late summer level.

No unscheduled hydrologic products were issued during April.



# USGS 04290500 WINOOSKI RIVER NEAR ESSEX JUNCTION, VT

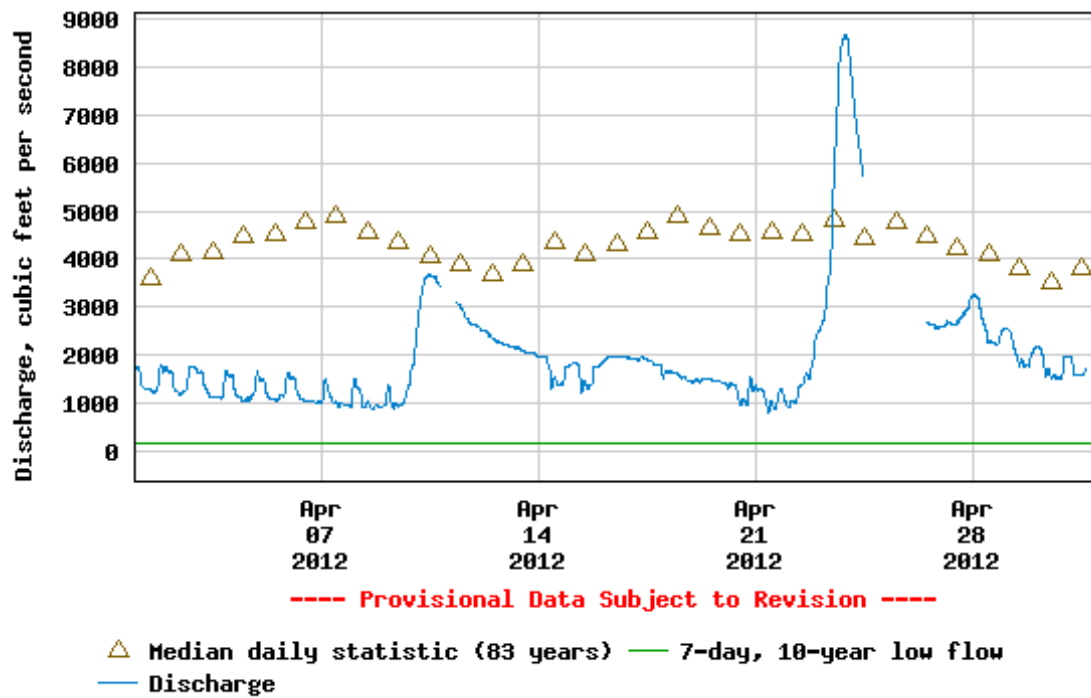


Figure 1, Winooski at Essex Junction VT. Note two river rises, otherwise well below normal flow

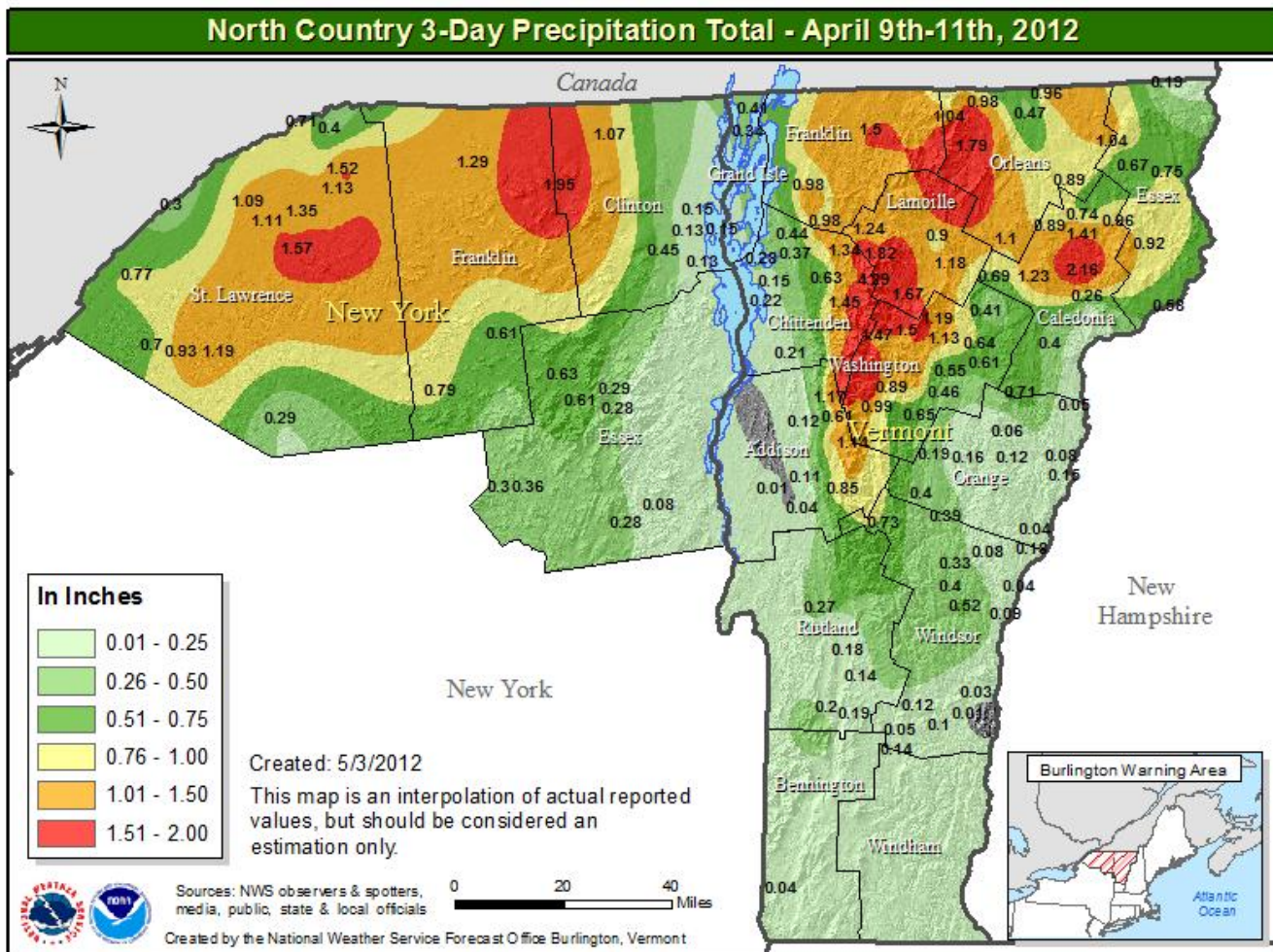


Figure 2

# North Country Storm Total Snowfall - Apr 9th - Apr 11th, 2012

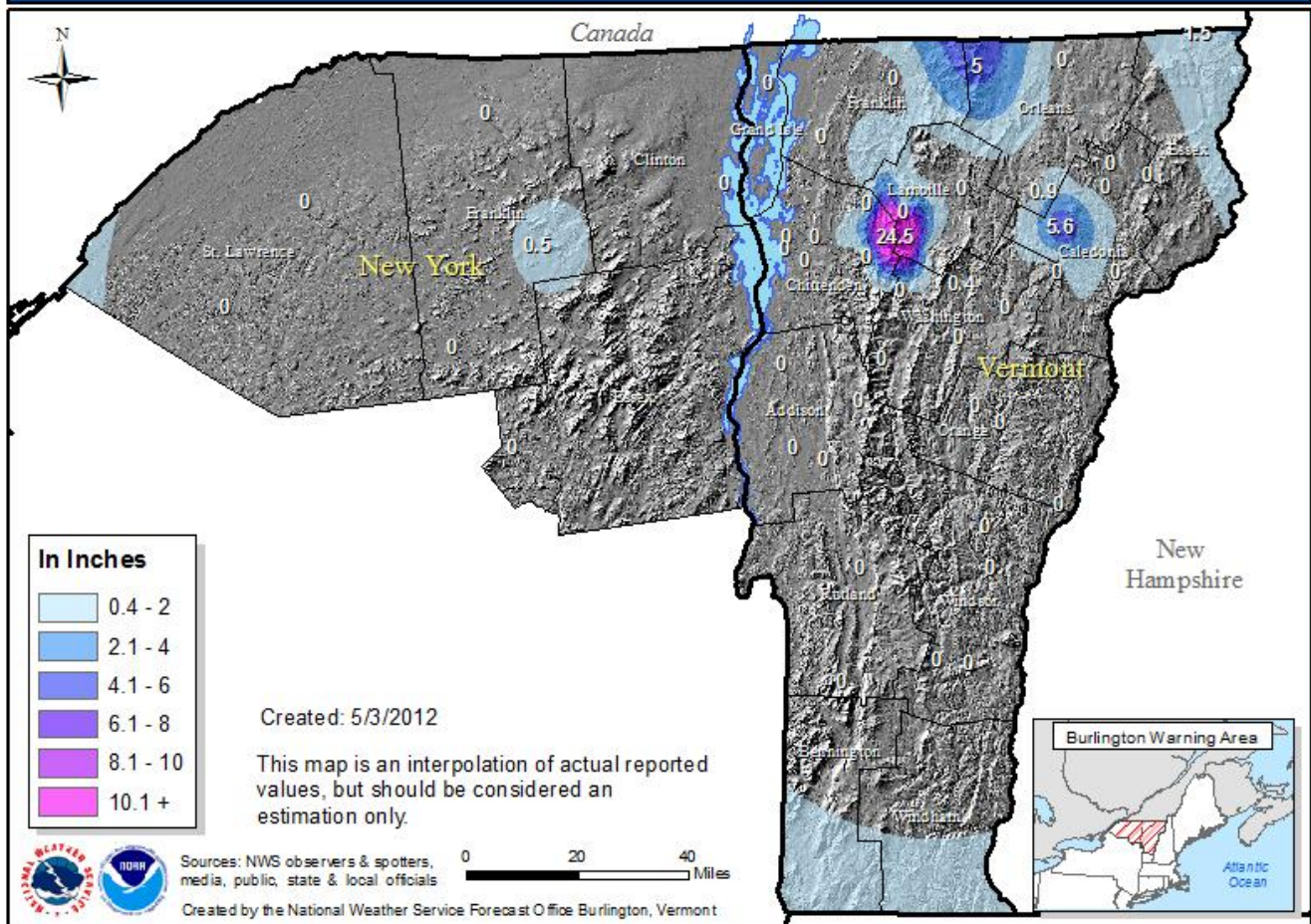


Figure 3

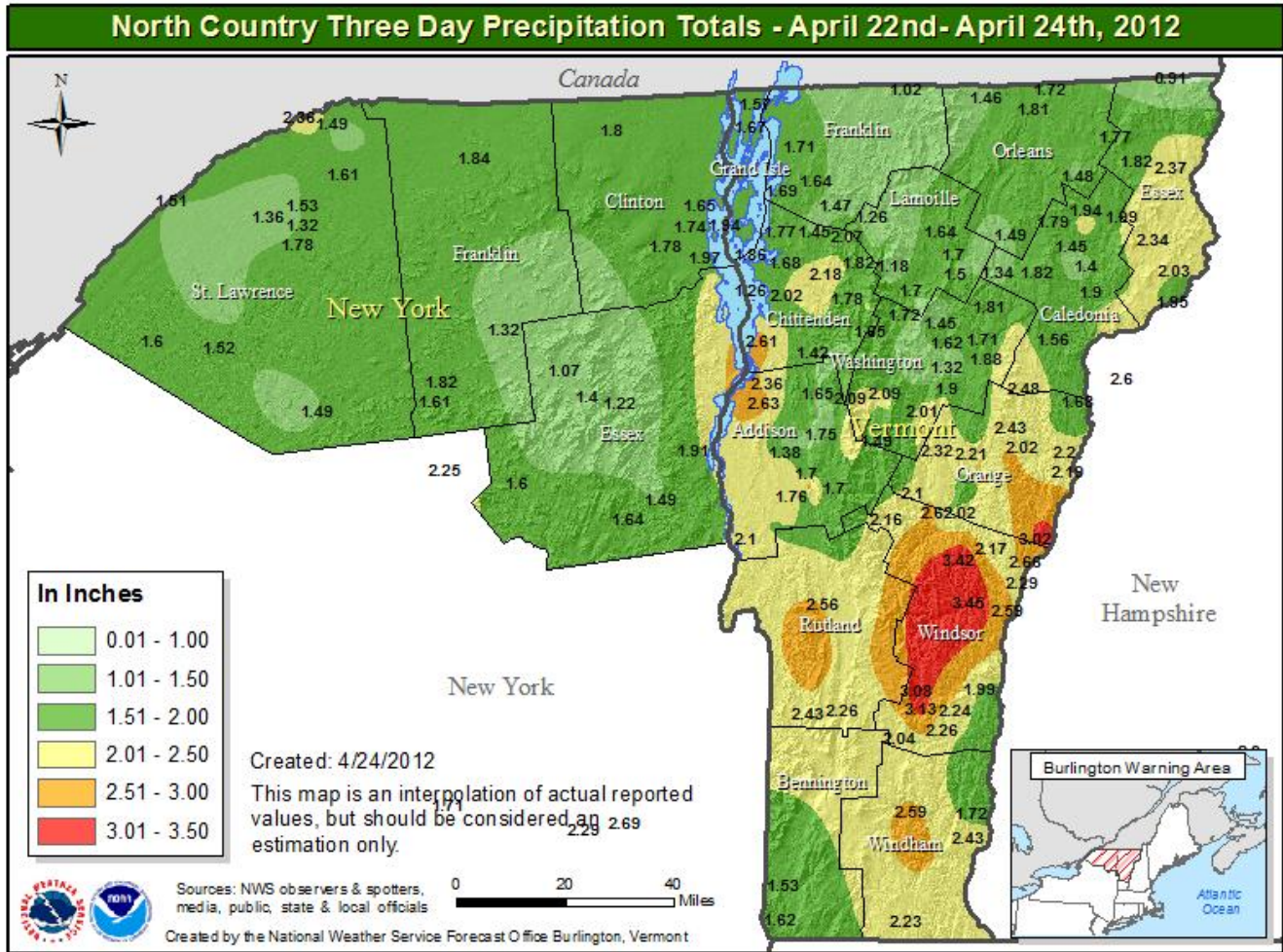


Figure 4



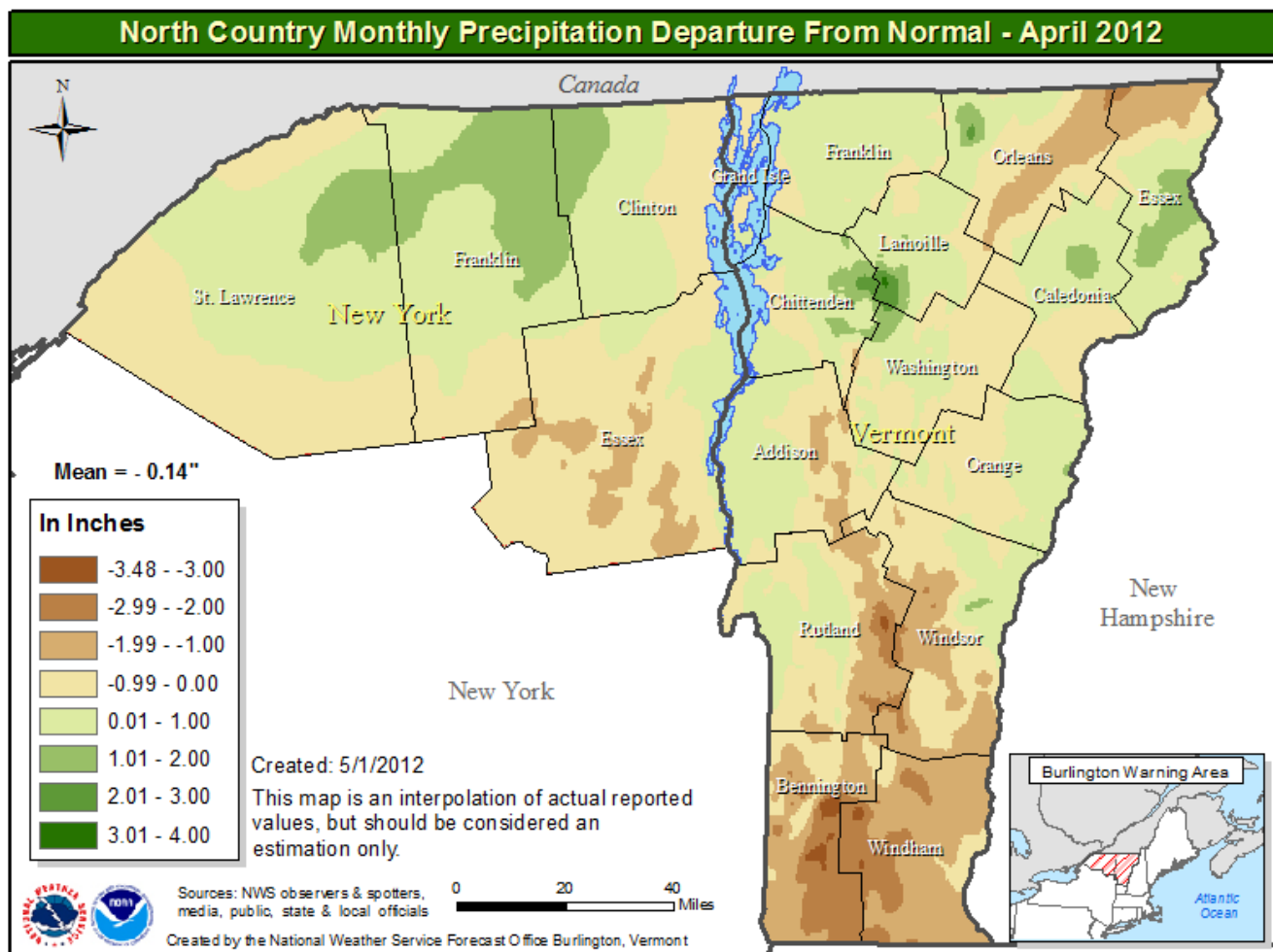


Figure 6

**Significant River Crests**

**April 2012**

**WFO Burlington VT**

-none-